

ABSTRACT

A method and test configuration for performing a gross I/O functionality test at wafer sort is described. The method uses a current injector, such as a pullup or a pulldown on an I/O pad, to inject current at the I/O pad, and based on the resulting voltage, determines if the I/O characteristics of the IC meet the performance criteria set by a manufacturer. In some embodiments, the test configuration can comprise an output buffer, which can be a tristate buffer, and/or an input buffer for verifying the performance of those components. The method and test configuration allow such tests to be performed at wafer sort without a precision measurement unit and without direct access to the I/O pad to be tested.